

## **4.15 CUMULATIVE IMPACTS**

Cumulative impacts may result when the environmental effects associated with a proposed project are superimposed on, or added to, either temporary (construction related) or permanent (operation related) impacts associated with past, present, or reasonably foreseeable future projects. Although the individual impact of each separate project may be minor, the additive or synergistic effects of multiple projects could be significant.

Existing environmental conditions in the Project area reflect changes based on past projects and activities. Much of the Project area is rural and relatively undeveloped. However, significant changes to portions of the Project area have resulted from activities related to agriculture, mining, water diversion, transportation projects, recreation, exotic species introductions, and residential/commercial development.

Table 4.15-1 lists present or reasonably foreseeable future projects or activities that may cumulatively or additively impact resources that would be affected by construction and operation of the North Baja Pipeline Expansion Project. Construction schedules of the future projects depend on factors such as economics, funding, and regulatory considerations. Projects and activities included in this analysis are generally those of comparable magnitude and nature of impact, and are located within the same counties that would be affected by the North Baja Pipeline Expansion Project. With some exceptions, more geographically distant projects are not assessed because their impact would generally be localized and, therefore, would not contribute significantly to cumulative impacts in the proposed Project area.

### **4.15.1 Geology and Soils**

The facilities associated with the North Baja Pipeline Expansion Project are expected to have a temporary but direct impact on near-surface geology and soils. Impacts on geology and soils could lead to poor revegetation potential and indirectly affect wildlife and aquatic resources as a result of poor vegetative cover and increased erosion and sedimentation. The soil stabilization and revegetation requirements included in North Baja's CM&R Plan would prevent or minimize any indirect impacts. Because the direct effects would be highly localized and limited primarily to the period of construction, cumulative impacts on geology and soils would only occur if other projects are constructed at the same time and place as the proposed facilities. The construction of several of the projects listed in Table 4.15-1 would coincide with the schedule proposed for the North Baja Pipeline Expansion Project. Projects that require significant excavation or grading such as the Drop 2 Storage Reservoir Project, the landfill and mine expansions, and residential developments would also have temporary direct impacts on near-surface geology and soils. The additive impact of the North Baja Pipeline Expansion Project on most of these projects would be minimal because they would not occur within the same local vicinity. The Drop 2 Storage Reservoir Project, however, would be relatively close to the IID Lateral. While there would be the potential for cumulative impacts on geological resources and soils if the project was constructed concurrently with the IID Lateral, any cumulative impact on geology and soils would be minimized by the implementation of erosion control and restoration measures during the construction and restoration of the projects. Consequently, any potential cumulative impacts on geological resources and soils would be temporary and minor.

TABLE 4.15-1

**Existing or Proposed Activities Cumulatively Affecting Resources of Concern  
for the North Baja Pipeline Expansion Project**

Activity/Project	County	Description	Approximate Acres of Land Affected	Anticipated Construction Dates
Blythe Energy Project Phase II	Riverside	Expansion of electrical generation facilities	66.0	Unknown
Blythe Energy Project Transmission Line Modification	Riverside	Installation of 74.1 miles of 230-kilovolt transmission lines	174.0	2007
Palo Verde-Devers Transmission Line	Riverside	Installation of 230 miles of 500-kilovolt transmission lines	4,015.0	2009
Edgewater Lane Planned Residential Community	Riverside	Residential development including 46 single-family homes	Unknown	2007
All-American Canal Lining Project	Imperial	Install concrete canal lining	2,161.0	2007
Unit 3 Repower	Imperial	Expansion of electrical generation facilities	4.0	2009
Department of Homeland Security, INS Border Fence	Imperial	Construction of a fence along the Mexican border	Unknown	Unknown
Drop 2 Storage Reservoir Project	Imperial	Construction of a reservoir and canal	916.0	2007-2008
BLM ISDRA - expansion Buttercup Valley Recreation Area	Imperial	Establish a ranger station and improvements to campground	Unknown	2007
BLM ISDRA Area Closure maintenance	Imperial	Closures of recreational areas	Unknown	Annual
Mesquite Regional Landfill	Imperial	Construction of regional landfill	4,000.0	2007-2008
Imperial Project	Imperial	Open pit gold mine development	1,302.0	Unknown
Mesquite Mine Expansion	Imperial	Expansion of gold mining operations	142.0	Unknown
Felicity Development	Imperial	Residential development	2,345.0	Unknown
Las Ventanas	Imperial	Residential/commercial development including 1,040 single-family homes	304.0	Unknown
Esmeralda Estates	Imperial	Residential development including 293 single-family homes	80.0	2008
Rancho Diamante	Imperial	Residential/commercial development including 2,257 single-family homes and 1,944 multi-family units	1,350.0	2008
Los Lagos	Imperial	Residential/commercial development including 1,132 single-family homes	500.0	2008
Estrella Subdivision	Imperial	Residential development including 371 single-family homes and 400 multi-family units	150.0	2008
Gasoducto Bajanorte Expansion Project (Phase I) <sup>a</sup>	Mexico	Installation of compression, reconfiguration of an existing pipeline, and construction of a 45-mile-long pipeline lateral	Unknown	2007
Gasoducto Bajanorte Expansion Project (Phase II) <sup>a</sup>	Mexico	Installation of compression and construction of a 140-mile-long pipeline loop	Unknown	2009

<sup>a</sup> The Gasoducto Bajanorte Expansion Project would not be located within the same counties as the North Baja Pipeline Expansion Project; however, cumulative impacts could result if this project were to be constructed at the same time as North Baja's proposed Project, specifically cumulative impacts on air quality. However, based on the analysis in Section 4.15.8, no significant cumulative impacts on air quality would occur.

#### **4.15.2 Waterbodies and Wetlands**

The North Baja Pipeline Expansion Project would require the crossing of 2 perennial waterbodies, 73 irrigation canals and drains, and 265 dry washes. The proposed Project would not involve in-stream activities or the construction of permanent diversions or dams and, therefore, is expected to have only temporary impacts, if any, on surface water quality. With the exception of Rannells Drain that would be crossed by the B-line and two unnamed canals that would be crossed by the Arrowhead Extension, all flowing waterbodies would either be crossed via an HDD, a bore, or would be avoided by crossing culverted portions of the waterbodies; therefore, the potential for the North Baja Pipeline Expansion Project to cumulatively affect surface waters within the region is low. The greatest potential for impacts on waterbodies that would be crossed by the proposed Project is if a frac-out were to occur during one of the proposed HDD crossings. Runoff from construction activities near waterbodies could also result in cumulative impacts, although this effect would be relatively minor and would be controlled by implementation of erosion and sediment control measures and by compliance with Federal, State, and local requirements. Additionally, indirect economic impacts on individuals and/or communities could result if surface waters were to become contaminated and/or limitations were placed on the beneficial uses (e.g., potable water supply, recreation, and fishing) of the affected waters. However, the potential for contamination during the construction of the North Baja Pipeline Expansion Project would be minor due to the low frequency and volumes of these occurrences and would be further minimized by implementation of North Baja's SPCC Plan.

Several of the projects listed in Table 4.15-1 are located within the watersheds crossed by the North Baja Pipeline Expansion Project, and some of these projects (e.g., Edgewater residential development, the All-American Canal Lining Project, and the Drop 2 Storage Reservoir Project) could potentially result in impacts on surface waters; however, water quality impacts resulting from construction of the proposed Project, if any, would be temporary. The potential for a frac-out at the proposed waterbody crossings would be low according to North Baja's geotechnical studies and, with the exception of the Rannells Drain crossing, streambank disturbance would be avoided. Additionally, the potential for erosion and sedimentation resulting from the disturbance of areas adjacent to waterbodies in the Project area is low given the typically flat topography and arid climate of the Project area.

Although there is the potential that cumulative impacts could result if the North Baja Pipeline Expansion Project were constructed in addition to other projects listed in Table 4.15-1, the geographic extent and duration of disturbances caused by construction of the Project would be minimal and further minimized by the implementation of North Baja's Project-specific CM&R and SPCC Plans. Therefore, the collective effects of these projects on surface water resources are expected to be minor.

Impacts on wetlands would result from construction of the proposed Project and some of the other reasonably foreseeable future projects. Specifically, the All-American Canal Lining Project would impact wetlands by reducing or eliminating the water source for wetlands that depend on seepage from the currently unlined portions of the canal. In contrast, the North Baja Pipeline Expansion Project would not result in the permanent loss or alteration of wetlands. Wetlands affected by the proposed Project would be restored following construction, and based on the mitigation monitoring reports completed for the A-Line, the primarily tamarisk-dominated wetlands affected would revegetate within 2 to 3 years. Therefore, construction and operation of the North Baja Pipeline Expansion Project would not contribute to cumulative long-term impacts on wetlands within the region.

#### **4.15.3 Vegetation, Wildlife and Habitat, and Aquatic Resources**

When projects are constructed at the same time or close to the same time, they could have a cumulative impact on vegetation and wildlife occurring in the area. Right-of-way clearing and grading and other construction activities associated with the North Baja Pipeline Expansion Project along with

other construction projects, including the All-American Canal Lining Project, the Gasoducto Bajanorte Expansion Project, the Edgewater Lane Planned Residential Community, and the mining and landfill expansion projects would result in the removal of vegetation; alteration of wildlife habitat; displacement of wildlife; and other secondary effects such as increased population stress, predation, and the potential establishment of invasive plant species. These effects would be greatest where the other projects are constructed within the same time frame and area as the proposed Project and where the recovery time of the vegetation/habitat is equal to that of the Project (i.e., long term). Because of the long-term impacts that would occur as a result of clearing desert vegetation, the North Baja Pipeline Expansion Project, if constructed along with the other projects listed in Table 4.15-1, would result in cumulative impacts on vegetation and wildlife habitats. North Baja's proposal to overlap its right-of-way onto the previously disturbed construction right-of-way, which is subject to restoration requirements, limit new clearing in desert wash woodlands, and construct within the road shoulder along portions of the B-Line, the Arrowhead Extension, and the IID Lateral would minimize the areas of previously undisturbed vegetation that would be affected and thereby not contribute to additional cumulative impacts on vegetation and wildlife habitats. Implementation of North Baja's CM&R Plan would promote revegetation of the right-of-way following construction. Disturbance in areas of desert wash woodland and areas designated as desert tortoise habitat would require compensatory mitigation in addition to restoration of the right-of-way. Additionally, because the amount of vegetation/habitat affected would be small compared to that which is regionally available, and the entire right-of-way would be allowed to return to preconstruction conditions, any cumulative impact may be long term but would be less than significant.

The projects listed in Table 4.15-1 that are linear in nature have the greatest potential to fragment wildlife habitat; however, this effect would be minimal because most of these projects (e.g., the All-American Canal Lining project, and the Gasoducto Bajanorte Expansion Project) would be adjacent to existing linear facilities and would only incrementally widen existing corridors. Similarly, many of the non-linear projects (i.e., the Drop 2 Storage Reservoir Project and the mine and landfill expansions), would occur within or adjacent to previously disturbed locations and only incrementally increase the extent of disturbance. Potential habitat fragmentation resulting from the proposed Project would be minimal because the areas would be allowed to return to pre-existing conditions although, in the case of desert habitats, this would occur over the long term. All of the projects would implement mitigation measures designed to minimize the potential for long-term erosion, increase the stability of site conditions, and in many cases control the spread of noxious weeds, thereby minimizing the degree and duration of the cumulative impacts of these projects.

Construction of the North Baja Pipeline Expansion Project at the same time as other projects listed in Table 4.15-1 that would affect waterbodies could cause cumulative impacts on aquatic resources within the Project area. The crossing of the Colorado River has the greatest potential to affect aquatic resources because it is the only waterbody with a designated fishery that would be affected by the Project. Because the river would be crossed using the HDD method, impacts are not expected to occur. As previously noted, the potential for a frac-out at the Colorado River crossing location would be low and impacts resulting from a frac-out, should one occur, would be minimized by the implementation of North Baja's HDD Plan. The duration of any disturbances caused by construction of the North Baja Pipeline Expansion Project would be minimal and further minimized by the implementation North Baja's CM&R, SPCC, and HDD Plans in addition to any conditions required by the COE and CDFG as part of their respective permit approvals. Additionally, none of the projects listed in Table 4.15-1 would involve direct in-stream impacts on the Colorado River.

Animal and plant species that are federally and/or State-listed threatened and endangered species and their critical habitat would be affected by the North Baja Pipeline Expansion Project. Cumulative impacts on these species could result if other foreseeable future projects would also affect the same species or their habitats. However, conservation measures would likely be required for each of these

projects by the jurisdictional agencies to minimize potential impacts on federally and State-listed species. Additionally, conservation measures may be recommended for candidate species and species of concern. Conservation measures would be project-specific and would be expected to reduce impacts such that the projects would not adversely affect the majority of special status species or would not jeopardize the continued existence of a species or cause the adverse modification of critical habitat. However, the Agency Staffs have determined that two species, the desert tortoise and Peirson's milk-vetch, as well as critical habitat for the desert tortoise, would be likely adversely affected by the Project (see Section 4.7) and would result in cumulative impacts on a special status species if other projects listed in Table 4.15-1 would also occur within desert habitats that support these species.

#### **4.15.4 Land Use, Special Management Areas, Recreation and Public Interest Areas, and Aesthetic Resources**

The proposed Project and several other foreseeable future projects would result in both temporary and permanent changes to current land uses. Much of the land that would be disturbed by construction is open land. The facilities associated with the North Baja Pipeline Expansion Project would temporarily disturb about 1,760.5 acres of land of which 69 percent would be open land, 25 percent would be developed land, and 6 percent would be agricultural land. The All-American Lining Project, Drop 2 Storage Reservoir Project, and mining and landfill expansion projects listed in Table 4.15-1 would disturb hundreds of additional acres of land affecting a variety of land uses. The residential development projects proposed for Imperial County would primarily affect farmlands. While most of these projects would have permanent impacts on land uses, the majority of land use impacts associated with the North Baja Pipeline Expansion Project would be temporary, as most land uses would be allowed to revert to prior uses following construction. Permanent impacts on land use would be small because 94 percent of the land affected by construction of the pipeline facilities would be allowed to revert to prior uses following construction with no restrictions and only 2.0 acres of additional land would be required for the operation of aboveground facilities.

The proposed Project, if built at the same time as other foreseeable future projects, could result in cumulative impacts on recreational and public interest areas if these projects would affect the same area or feature (e.g., trails) at the same time. The proposed pipeline facilities would cross 11 recreation or public interest areas and would be adjacent to several others. However, because the North Baja Pipeline Expansion Project would be constructed primarily within or adjacent to existing rights-of-way and would not substantially affect the current land uses, most Project-related impacts would be short term, often lasting only for the duration of construction through that area, after which the area would be restored to its preconstruction condition.

The visual character of the existing landscape is defined by historic and current land uses such as agricultural, recreation, conservation, and development. The visual qualities of the landscape are further influenced by existing linear installations such as highways, railroads, pipelines, and electrical transmission and distribution lines. Within this context, the proposed meter stations, valves, and other aboveground facilities would have the most visual impact, while the pipeline portion of the proposed Project would be visually subordinate to the existing landscape character and would contribute only incrementally to overall visual conditions, particularly after completion of reclamation and the re-establishment of vegetation. However, the majority of the Project would affect desert vegetation where the impact would be greater because it would take many years to regenerate. Of the projects listed in Table 4.15-1, the electrical generation facility, mines and landfill expansions, and the residential subdivisions would have the most impact on visual resources in the area. Because 99 percent of the proposed Project would be located within or adjacent to existing rights-of-way, the visual impact would be minimal. Additionally, the majority of the proposed aboveground facilities would be collocated with other aboveground facilities. This collocation would lessen the visual impact of the aboveground facilities because their presence would be consistent with the current viewshed in the area. The

aboveground facilities that would not be collocated with existing facilities would be painted to blend with the surrounding landscape. Therefore, the proposed Project would not significantly contribute to cumulative effects on visual resources.

#### **4.15.5 Socioeconomics**

Present and reasonably foreseeable future projects and activities could cumulatively impact socioeconomic conditions in the Project area. Employment, housing, infrastructure, and public services could experience both beneficial and detrimental impacts.

##### **Economy and Employment**

The projects considered in this section would have cumulative effects on employment during construction if more than one project is built at the same time. The North Baja Pipeline Expansion Project expects to employ up to 400 workers during the peak construction months for the B-Line but would be considerably less during other phases of construction. North Baja estimates that 25 percent of its construction workforce would be local hires. If the larger projects, such as the All-American Canal Lining Project, landfill and mine expansions, and residential development projects are built simultaneously, the demand for workers could exceed the local supply of appropriately skilled labor. The counties affected by the Project have a civilian labor force of about 2,230,030 people and an average unemployment rate of 6.5 percent. This suggests that the local labor force could meet much of the employment needs induced by construction of these projects, although it is unknown whether a sufficient number of these unemployed persons have the necessary skills to work on these projects. Therefore, if these projects are constructed at the same time, the demand for local workers may exceed supply. It is assumed that the remainder of the employment positions would be filled by non-local hires. Because North Baja currently operates pipeline facilities in the area, no additional permanent employees would be required.

In addition to impacts on local employment, these projects would provide an increase in tax revenue for California, the counties, and other local economies through the payment of payroll tax, sales tax, property tax, and other taxes and fees. As discussed in Section 4.9.6, the estimated payroll for the proposed North Baja Pipeline Expansion Project would be \$50 million during the construction phase and the annual property taxes are anticipated to be \$3.4 million. A similar net increase in payroll and tax revenues could be expected from the other projects listed in Table 4.15-1. The proposed Project would have both short- and long-term beneficial impacts on State, county, and local economies.

##### **Temporary Housing**

Temporary housing for the construction workers would be needed for the portion of the workforce not drawn from the local area. For the proposed North Baja Pipeline Expansion Project, it is estimated that a maximum of 320 housing units would be needed per month to accommodate the non-resident construction workforce. Given the vacancy rates, the number of rental housing units in the area, and the number of hotel/motel rooms and campgrounds available in the cities and towns in the vicinity of the Project, construction crews should not encounter difficulty in finding temporary housing. If construction occurs concurrently with other projects, temporary housing would still be available but may be slightly more difficult to find and/or more expensive to secure. Regardless, these effects would be temporary, lasting only for the duration of construction, and there would be no long-term cumulative effect on housing from the proposed Project.

##### **Public Services**

The cumulative impact of the North Baja Pipeline Expansion Project and the other projects listed in Table 4.15-1 on infrastructure and public services would depend on the number of projects under

construction at one time. The small incremental demands of several projects occurring at the same time could become difficult for police, fire, and emergency service personnel to address. This problem would be temporary, occur only for the length of construction, and could be mitigated by the various project sponsors providing their own personnel to augment the local capability or by providing additional funds or training for local personnel. Two fire departments within the Project area, the Winterhaven Fire Protection District and the Ehrenberg Fire Department, submitted comments in support of the Project. No long-term cumulative effect on infrastructure and public services is anticipated from the proposed Project.

#### **4.15.6 Transportation and Traffic**

Where installation of the proposed Project occurs at road crossings, road traffic could be temporarily disrupted or delayed. The transportation system in the three counties where the proposed facilities would be constructed is well developed. Construction activities could disrupt traffic flow, and result in cumulative impacts on traffic in the Project area if several projects are being constructed at once. North Baja developed Traffic Management Plans for 18<sup>th</sup> Avenue in Riverside County and for Imperial County roadways (see Appendix H) to mitigate impacts associated with construction along road shoulders. In Section 4.10.2, the Agency Staffs have recommended that North Baja develop a Traffic Management Plan for Arrowhead Boulevard. Other major roads and highways would be bored and construction would not affect traffic. The addition of traffic associated with construction personnel commuting to and from the Project sites could affect traffic congestion in the region if several of the projects listed in Table 4.15-1 would occur within the same time frame. However, workers associated with the North Baja Pipeline Expansion Project would commute to and from the pipe storage and contractor yards or aboveground facility sites during off-peak traffic hours (e.g., before 7:00 AM and after 6:00 PM). Workers traveling between the pipe storage and contractor yards and the construction site would likely share rides. Moreover, it is unlikely that each project would reach peak traffic conditions simultaneously; therefore, potential cumulative impacts on traffic from construction, should they occur, are expected to be temporary and short term. In its comments on the draft EIS/EIR, the BOR noted that the construction schedule of the IID Lateral has the potential to coincide with the BOR's Drop 2 Storage Reservoir Project. Because these two projects would be within close proximity to one another, the construction of North Baja Pipeline Expansion Project at the same time as the Drop 2 Storage Reservoir Project would result in cumulative impacts on traffic congestion. To avoid or reduce potential traffic impacts, North Baja would continue to coordinate activities associated with construction of the IID Lateral with the BLM and the BOR. Once construction of the proposed Project is complete, there would be no impacts on traffic from operation or maintenance of the facilities.

#### **4.15.7 Cultural Resources**

Past disturbances to cultural resources sites in the Project area have been related to legal collecting; accidental disturbance by OHV users; intentional destruction or vandalism; and construction and maintenance operations associated with existing roads, railroads, and transmission lines, including North Baja's existing A-Line. The currently proposed projects listed in Table 4.15-1 that are defined as Federal actions would include mitigation measures designed to avoid or minimize additional direct impacts on cultural resources. Where direct impacts on significant cultural resources are unavoidable, mitigation (e.g., recovery and curation of materials) would occur before construction. Non-Federal actions would need to comply with any mitigation measures required by the State. Increased access by rights-of-way and service roads would increase the potential for trespass or vandalism at previously inaccessible sites. However, to minimize the potential for the pipeline rights-of-way to increase accessibility for OHV use into previously inaccessible, environmentally sensitive areas, North Baja would implement various blocking measures where it has been determined that such measures may be effective in discouraging OHV use (see Section 4.8.5). In addition, North Baja would mitigate impacts on unevaluated sites and sites that are eligible for listing on the NRHP by the use of avoidance measures (including installation of exclusion fencing), construction monitors, narrowing of the right-of-way, and/or

data recovery. Therefore, the proposed Project would only incrementally contribute to the effects of the other projects and would not result in significant cumulative impacts on cultural resources in the area.

#### **4.15.8 Air Quality**

The North Baja Pipeline Expansion Project and the projects listed in Table 4.15-1 would all involve the use of heavy equipment that would generate emissions of air contaminants and fugitive dust. The majority of these impacts would be minimized because the construction activities would occur over a large geographical area. Any air impacts would be localized and confined primarily to the airsheds in which the projects occur. Cumulative impacts on air quality, therefore, would be limited primarily to areas where more than one project is proposed within the same airshed and would be constructed simultaneously. Several projects, primarily industrial and housing development projects, are planned in the vicinity of the Project and may be constructed within the same time frame. These effects could temporarily add to the ongoing effects from agricultural activities, traffic, and OHV use in the Project area. Mitigation measures similar to those outlined in Section 4.12.4 for the proposed Project would likely be required for these other projects. Because the projects listed in Table 4.15-1 would take place over a large area; have varying construction schedules; and adhere to Federal, State, and local regulations for the protection of ambient air quality, long-term cumulative impacts on air quality would not be anticipated. Additionally, because no additional compression would be installed as part of the North Baja Pipeline Expansion Project, the proposed Project would not add any stationary or permanent sources of NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, PM<sub>2.5</sub>, or SO<sub>2</sub> to the environment; therefore, operation of the North Baja Pipeline Expansion Project would not contribute cumulatively to air quality. In their comments on the draft EIS/EIR, the EPA, the SCAQMD, the ICAPCD, and the Border Power Plant Working Group indicated that the Agency Staffs' definition of the proposed Project is too limited in focus. Sections 1.1, 1.4, and 4.12 have been revised to include additional information supporting the Agency Staffs' Project definition and cumulative impacts evaluation.

The North Baja Pipeline Expansion Project is not proposed to serve any new, modified, or expanded power plants in the Project area. However, it could be speculated that in the future the Project could transport gas for new or expanded power plants; therefore, the Project could result in a cumulative impact on the region's air quality. Any new projects, including modification of existing facilities, would have to meet applicable air quality standards of the regions where they are located.

As discussed in Section 1.4.1, Semptra's existing Gasoducto Bajanorte pipeline would be expanded in coordination with North Baja's phased expansion. The Gasoducto Bajanorte pipeline, which currently takes gas from the North Baja system at the U.S.-Mexico border and moves it west, would be reconfigured to move gas in the opposite direction, similar to the reconfiguration of the North Baja system that would occur during Phase I. Transport of the initial volumes of LNG-source gas would also require the construction of a 45-mile-long pipeline lateral from the ECA terminal to connect to the Gasoducto Bajanorte pipeline and a new compressor station (Algodones Compressor Station) on the Gasoducto Bajanorte pipeline. This compressor station would be constructed about 2.5 miles south of the California-Mexico border and 3 miles west of the Arizona-Mexico border in the State of Baja California del Norte just southwest of the border town of Algodones. All of the permits have been obtained for the construction of the lateral, the reconfiguration of the Gasoducto Bajanorte pipeline, and the construction of the Algodones Compressor Station, which are planned for completion in late 2007.

The capacity of the Gasoducto Bajanorte pipeline system would similarly be expanded in coordination with North Baja's Phase II expansion. Up to 100 percent looping of the Gasoducto Bajanorte pipeline and additional compression would be required, both at the Algodones Compressor Station and at a new compressor station near Mexicali (Mexicali Compressor Station). These facilities would be constructed in 2009 to be operational by 2010. These facilities are shown on Figure 1.4-1.



Because of the proximity of the proposed compressor stations in Mexico, the potential exists for operating emissions to affect air quality in the United States, specifically in the Imperial Valley portion of Imperial County. The cumulative impacts are described below by project phase.

### Phase I Air Quality Impacts – Algodones Compressor Station

Sempra would install two 15,000 horsepower (hp) combustion turbines at the Algodones Compressor Station for a total of 30,000 hp of compression. However, only one 15,000-hp turbine would be operated at a time; the other turbine would be kept on reserve and rotated in and out of service. Using data provided by the turbine manufacturer and the operational data provided by Sempra, the emissions from one 15,000-hp turbine were modeled to determine the impact on nearby receptor locations. The EPA's ISCST3 dispersion model with the default regulatory options and 5 years of representative meteorological data from Yuma, Arizona provided by the ADEQ were used. Table 4.15.8-1 presents a summary of the modeling analysis results at the maximally impacted receptor in the vicinity of the U.S.-Mexico border from one turbine. The data in Table 4.15.8-1 indicate that emissions from the Algodones Compressor Station would result in impacts below Federal significant impact levels and the U.S. and California State standards.

Pollutant	Averaging Period	Background ( $\mu\text{g}/\text{m}^3$ )	Modeled Impact ( $\mu\text{g}/\text{m}^3$ )	Significant Impact Level ( $\mu\text{g}/\text{m}^3$ )	Federal/State Standards ( $\mu\text{g}/\text{m}^3$ ) <sup>b</sup>	Is Standard Currently Exceeded?
NO <sub>2</sub>	1 hour	355	2.625	NA	NS/470	No
	Annual AM	25	.044	1	100/NS	No
CO	1 hour	-	3.748	2000	40,000/23,000	No
	8 hour	9,478	1.325	500	10,000/10,000	No
PM <sub>10</sub>	24 hour	509	.083	5	150/50	Yes <sup>c</sup>
	Annual AM	80	.007	1	NS/20	Yes <sup>c</sup>
PM <sub>2.5</sub> <sup>d</sup>	24 Hour	51.4	.083	5	35/NS	Yes <sup>c</sup>
	Annual	11.9	.007	1	15/12	No
SO <sub>2</sub>	1 hour	-	.017	NA	655/NS	No
	3 hour	-	.015	25	1,300/NS	No
	24 hour	8	.003	5	365/105	No
	Annual AM	-	<.001	1	80/NS	No

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter  
 NO<sub>2</sub> = nitrogen dioxide  
 AM = arithmetic mean  
 CO = carbon monoxide  
 PM<sub>10</sub> = particulate matter having an aerodynamic diameter less than or equal to 10 microns  
 PM<sub>2.5</sub> = particulate matter having an aerodynamic diameter less than or equal to 2.5 microns  
 SO<sub>2</sub> = sulfur dioxide

<sup>a</sup> Modeled impacts are at a location in the vicinity of the U.S.-Mexico border, which is approximately 4 kilometers (4,000 meters or 13,100 feet) from the compressor station site. Only one of the two proposed turbines would operate at any single time (i.e., the cumulative run time for both turbines would not exceed 8,760 hours per year, and two turbines would not run simultaneously.)

<sup>b</sup> Federal standard/State standard. NS = no standard.

<sup>c</sup> The Algodones Compressor Station's incremental impact does not exceed the applicable Significant Impact Level and is well below 0.5 percent of the applicable Federal and/or State standards; therefore, it would not significantly impact the existing nonattainment area.

<sup>d</sup> PM<sub>2.5</sub> emissions from the turbine were assumed to equal emissions of PM<sub>10</sub> per particulate matter specification profiles from the California Air Resources Board.

It should be noted that the PM<sub>10</sub>/PM<sub>2.5</sub> impacts from the turbine would be insignificant (i.e., below the significant levels for PSD Class II areas<sup>11</sup> of 5 micrograms per cubic meter (µg/m<sup>3</sup>) on a 24-hour basis, and 1 µg/m<sup>3</sup> on an annual basis) and they are also below the significant monitoring concentration levels for PM<sub>10</sub> of 10 µg/m<sup>3</sup> on a 24-hour basis. However, a portion of Imperial County that is within the Project area (specifically the Imperial Valley) is nonattainment for PM<sub>10</sub> and unclassified for PM<sub>2.5</sub>, primarily due to ambient concentrations of windblown dust, not due to ambient concentrations of PM<sub>10</sub>/PM<sub>2.5</sub> from combustion sources.

## **Phase II Air Quality Impacts – Algodones and Mexicali Compressor Stations**

Sempra has not yet signed precedent agreements with all of the potential shippers in Phase II and, therefore, has not developed design details for its Phase II expansion. Sempra has indicated to North Baja, however, that the following design assumptions would be applicable for purposes of analyzing the potential cumulative impacts of the future compression additions on the Sempra system as follows:

- The Mexicali Compressor Station would be located on or adjacent immediately to the existing facilities (i.e., either the La Rosita Power Complex [LRPC] or the Termoelectrica de Mexicali Power Plant [TDM Plant]).
- The horsepower needed at the Mexicali Compressor Station would be approximately 75,000, while the required horsepower proposed for the Algodones Compression Station would be approximately 116,000 (of which approximately 15,000 hp would be contributed by the two turbines [with one compressor in continual reserve] already proposed for Phase I, which would leave an additional need at the site of approximately 100,000 hp).
- The turbines would be equipped with the following emissions control technologies:
  - installation and operation of low-NO<sub>x</sub> combustors;
  - good combustion practices (e.g., measurement and control of air flow, optimizing air/fuel ratios, etc.) would be implemented to reduce emissions of CO and VOC; and
  - clean fuels (natural gas) would be used to reduce emissions of PM<sub>10</sub> and PM<sub>2.5</sub>.

If the new turbines would be located near the existing power plants west of Mexicali, the result would be the mixing of the new exhaust plumes with the existing plumes at the existing sites. A complete and rapid mixing of the plumes allows for the characterization of new impacts using the modeling scenarios established in the previous Imperial-Mexicali 230kV Transmission Lines (Imperial-Mexicali) final EIS (DOE 2004). This was accomplished assuming that the resulting downwind impacts would be directly proportional to emissions levels. Table 4.15.8-2 shows the predicted concentrations at the maximally impacted receptor in the vicinity of the U.S.-Mexico border resulting from both the LRPC and TDM Plant emissions as documented in Table 4.3-6 of the Imperial-Mexicali final EIS (DOE 2004). These estimated impacts are based on the power plants emitting at the proposed maximum rates and are conservative.

<sup>11</sup> All areas not classified as a Federal Class I area are classified as a Class II area in accordance with section 162(b) of the Clean Air Act.

TABLE 4.15.8-2				
LRPC and TDM Plant Estimated Impacts				
Pollutant	Average Period	Impact at Maximum U.S. Receptor ( $\mu\text{g}/\text{m}^3$ )	Significant Impact Level ( $\mu\text{g}/\text{m}^3$ )	NAAQS ( $\mu\text{g}/\text{m}^3$ )
CO w/o catalyst	8 Hour	7.67	500	40,000
CO w/catalyst	8 Hour	1.09	500	40,000
NO <sub>2</sub>	1 Hour	6.41	NA	NA
PM <sub>10</sub> /PM <sub>2.5</sub>	24 Hour	4.07/4.07	5/5	150/65

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter  
 NO<sub>2</sub> = nitrogen dioxide  
 CO = carbon monoxide  
 PM<sub>10</sub> = particulate matter having an aerodynamic diameter less than or equal to 10 microns  
 PM<sub>2.5</sub> = particulate matter having an aerodynamic diameter less than or equal to 2.5 microns  
 NAAQS = National Ambient Air Quality Standards

Table 4.15.8-3 shows the cumulative totals of emissions from the Mexicali Compressor Station added to the LRPC and TDM Plant, and emissions associated with the Phase I/Phase II Algodones Compressor Station.

TABLE 4.15.8-3			
Cumulative Estimated Emissions by Site			
Pollutant	LRPC and TDM Plant (tpy)	LRPC, TDM Plant, and Mexicali Compressor Station (tpy)	Algodones Compressor Station Phase I and Phase II (tpy)
NO <sub>x</sub>	608	842	355.7
CO	3,089	3,383	442.1
VOC	1,069	1,080.0	16.4
SO <sub>x</sub>	30	31.5	2.5
PM <sub>10</sub> /PM <sub>2.5</sub>	1,208/1,208	1,247.4/1,247.4	60.6/60.6

tpy = tons per year  
 NO<sub>x</sub> = nitrogen oxides  
 CO = carbon monoxide  
 VOC = volatile organic compounds  
 SO<sub>x</sub> = sulfur oxides  
 PM<sub>10</sub> = particulate matter having an aerodynamic diameter less than or equal to 10 microns  
 PM<sub>2.5</sub> = particulate matter having an aerodynamic diameter less than or equal to 2.5 microns

Table 4.15.8-4 shows the resultant scaled ambient air quality impacts at the maximally impacted receptor location in the vicinity of the U.S.-Mexico border, considering the addition of the Mexicali Compressor Station emissions and the Phase I/II impacts at the Algodones Compressor Station for the same scenarios.

TABLE 4.15.8-4

Resultant Estimated Impacts at Maximum U.S. Receptor Locations					
Pollutant	Average Time	LRPC, TDM Plant, and Mexicali Compressor Station ( $\mu\text{g}/\text{m}^3$ )	Algodones Compressor Station Phase I and Phase II ( $\mu\text{g}/\text{m}^3$ )	Significant Impact Level ( $\mu\text{g}/\text{m}^3$ )	NAAQS ( $\mu\text{g}/\text{m}^3$ )
CO	8 Hour	8.40	3.56	500	40,000
NO <sub>2</sub>	1 Hour	8.88	7.88	NA	NA
PM <sub>10</sub> /PM <sub>2.5</sub>	24 Hour	4.2/4.2	0.28/0.28	5/5	150/65
$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter NO <sub>2</sub> = nitrogen dioxide CO = carbon monoxide PM <sub>10</sub> = particulate matter having an aerodynamic diameter less than or equal to 10 microns PM <sub>2.5</sub> = particulate matter having an aerodynamic diameter less than or equal to 2.5 microns NAAQS = National Ambient Air Quality Standards					

As shown in Table 4.15.8-4, no emitted pollutants at the Mexicali or Algodones Compressor Station sites would result in a predicted concentration above an established Significant Impact Level at the maximally impacted receptor located in the vicinity of the U.S.-Mexico border.

The Algodones Compressor Station emissions were not included with the LRPC and TDM Plant and Mexicali Compressor Station site emissions for purposes of modeling the cumulative impacts due to the following:

- the Algodones Compressor Station would be approximately 50+ miles (80+ kilometers) from the LRPC and TDM Plant sites;
- the generally accepted distance limitations of the ISCST3 dispersion model<sup>12</sup> is 31 miles or 50 kilometers; therefore, application of the model at distances greater than 50 kilometers would produce questionable results; and
- the cumulative impact of emissions from the Algodones Compressor Station on the LRPC/TDM Plant impact area, or vice versa, would be minimal considering the previous modeling performed for the LRPC/TDM Plant, and the recent modeling performed for the Algodones Compressor Station, which were conducted using the ISCST3 model, predicted concentrations below the established Significant Impact Levels within a few kilometers of the individual plant sites.

In addition, SO<sub>2</sub> emissions were not evaluated in the cumulative impacts analysis due to the following:

- emissions of SO<sub>2</sub> from all of the plants involved would not cumulatively add up to a value that exceeds the NSR or PSD major source threshold values;
- each individual plant site has SO<sub>2</sub> emissions that are considered minor;
- the previous Imperial-Mexicali final EIS (DOE 2004) analysis of emissions from the LRPC and TDM Plant only considered impacts from NO<sub>2</sub>, PM<sub>10</sub>, and CO, with no

<sup>12</sup> At the time the analysis was conducted, the EPA's ISCST3 was the preferred dispersion model for SIP revisions to existing sources and for NSR and PSD programs. While other air dispersion models are now currently available, the ISCST3 model is still deemed to be acceptable for this analysis.

modeling data presented for SO<sub>2</sub>; therefore, it was not included in the cumulative impacts analysis; and

- SO<sub>2</sub> impact data are presented for the Algodones Compressor Station (Phase I) in Table 4.15.8-1. The predicted ambient concentrations of SO<sub>2</sub> were so low that impacts for the Algodones Compressor Station (Phase II) were not predicted based on the assumption that modeled ambient concentrations are directly proportional to emissions, and the SO<sub>2</sub> emissions at the Algodones Compressor Station only increased by approximately 1.87 tpy, which if scaled from the Phase I impacts would not result in any SO<sub>2</sub> standard or Significant Impact Level to be exceeded.

Based on the above preliminary analysis, it is unlikely that emissions from the proposed future compressor stations would result in any significant cumulative ambient air quality impacts at receptors in the vicinity of or across the U.S. border.

### Air Toxics Emissions and Health Risk Impacts

A Health Risk Assessment was conducted to determine the potential impacts of the toxic air pollutants emitted by the existing power plants and proposed compressor stations. The analysis also includes the LRPC and TDM Plant.

Tables H-1 and H-2 of the Imperial-Mexicali final EIS (DOE 2004) indicate that the total Hazardous Air Pollutants (HAPs) emissions from the LRPC and TDM Plant are 35.2 and 9.9 tpy, respectively. Estimated HAPs emissions for the future compressors at the Mexicali Compressor Station and for the compressors at the Algodones Compressor Station would be 3.03 tpy and 4.03 tpy, respectively. Assuming that the risks at the maximally impacted receptor are directly proportional to emissions, and keeping all the modeling and risk assessment parameters constant to those used in the HAPs risk assessment modeling undertaken in the Imperial-Mexicali FEIS, the changes in risk can be directly calculated via the ratio of known emissions and known risks to expected future emissions. Table 4.15.8-5 presents the resultant scaled risk values subsequent to addition of the future compressor emissions.

TABLE 4.15.8-5			
Existing and Future Potential Risks			
Facility	Cancer Risk per Million <sup>a</sup>	Chronic Hazard Index <sup>b</sup>	Acute Hazard Index <sup>c</sup>
Existing LRPC	0.54	0.002	0.02
Existing TDM Plant	0.06	0.0007	0.007
Algodones Compressor Station (Phase I)	0.008	0.0002	0.0005
LRPC and Mexicali Compressor Station	0.59	0.0022	0.022
TDM Plant and Mexicali Compressor Station	0.078	0.0009	0.009
Algodones Compressor Station (Phase II)	0.062	0.0015	0.004
Significance Threshold	1.0	1.0	1.0
SCAQMD Threshold	0.5	0.5	0.5
<sup>a</sup> Average risk values per Table H-6, Imperial-Mexicali final EIS (DOE 2004). <sup>b</sup> Chronic hazard results from long-term exposure. <sup>c</sup> Acute hazard results from short-term exposure.			

As shown in Table 4.15.8-5, the average cancer risks, as well as the chronic and acute hazard indexes, would be well below the established significance thresholds used by California air districts. In addition, the future chronic and acute hazard indexes would also be well below the more stringent thresholds set by the SCAQMD for these evaluations at a level of 0.5. Therefore, the cumulative risks associated with the emissions from the existing power plants and the future compressor stations would be considered less than significant.

A comment was received requesting the identification of air impacts resulting from the total number of power plants and future development projects that could be constructed within the Southeast Desert Air Basin (SEDAB) and evaluation of the potential long-term air quality deterioration and possible human health impacts. Table 4.15-1 contains all “reasonably foreseeable future projects” within the SEDAB. Section 15144 of the State CEQA Guidelines states, in part, “While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.”

#### **4.15.9 Noise**

Because the impact of noise is highly localized and attenuates quickly as the distance from the noise source increases, cumulative impacts associated with construction or operation would be unlikely unless one or more of the projects listed in Table 4.15-1 is constructed at the same time in the same location. However, even short-term additional noise during construction could, for example, create enough disturbance to nesting birds or breeding toads to constitute a potential adverse impact. Although the Project could result in cumulative noise impacts if other projects listed in Table 4.15-1 would be constructed within the same time frame and vicinity, the majority of these impacts would be limited to the period of construction.

#### **4.15.10 Reliability and Safety**

Impact on reliability and public safety would be mitigated through the use of the DOT Minimum Federal Safety Standards in Title 49 CFR Part 192 and the CPUC, General Order 112-E., which are intended to protect the public and to prevent natural gas facility accidents and failures. In addition, North Baja’s construction contractors would be required to comply with the OSHA Safety and Health Regulations for Construction in Title 29 CFR Part 1926. Should a pipeline failure occur on the A-Line and the B-Line simultaneously, the PIR would fall within the PIR footprint of a failure of the proposed B-Line; therefore, the close proximity of the A-Line to the B-Line would not result in a cumulative impact on the PIR calculated for the Project. No cumulative impacts on safety and reliability would be anticipated to occur.

#### **4.15.11 Environmental Justice**

As discussed in Section 4.17, some communities within the PIR of the Project have low-income and minority populations compared to the affected counties as a whole. As a result, there is a potential for these populations to bear a disproportionate share of an adverse impact. However, none of the potential impacts of the Project that could affect environmental justice issues are considered significant. Therefore, the Project would neither result in a disproportionately high and adverse effect or impact on minority or low-income populations nor contribute to a cumulative impact on these populations.

#### **4.15.12 Conclusion**

The majority of cumulative impacts would be temporary and minor. However, long-term cumulative impacts would occur on vegetation, wildlife habitat, and special status species. Long-term

cumulative benefits would be realized from the boost to the local economy associated with tax revenues. Short-term cumulative benefits would also be realized through jobs and wages and purchases of goods and materials.

#### **4.15.13 No Project Alternative**

Under the No Project Alternative, no resources as discussed in each section would be affected; therefore, no cumulative impacts would result from this alternative.

#### 4.16 GROWTH-INDUCING IMPACTS

The CEQA requires the consideration and discussion in an EIR of the growth-inducing impact of a proposed project. NEPA does not have a similar requirement. As specified in sections 15126.2 (d) of the State CEQA Guidelines, an EIR shall:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Most development projects could induce growth in the area in which they are located. The following six criteria are used as a guide to evaluating the growth-inducing potential for the proposed Project.

1. Would the North Baja Pipeline Expansion Project foster growth or remove obstacles to economic or population growth?

The Project area is already served by various fuel supplies and economic activity is already taking place. The demand for energy and the proposed pipeline and Blythe connection are a result of, rather than a precursor to, development in this region. The region is currently undergoing significant growth and while there is no evidence at this time that the growth is being constrained by the lack of energy availability, the IID's Unit 3 Repower Project would increase its generating capacity by 84 megawatts, from 44 megawatts to 128 megawatts. Although it is recognized that the availability of a new or an alternative source of natural gas may be a contributing factor in stimulating economic and population growth and could result in the construction of additional power infrastructure, the power plant that the Project would serve is not solely dependent on the supply from the proposed Project. However, to the extent that the IID's Unit 3 Repower Project would diversify its suppliers of natural gas, the additional gas supplied by the proposed Project could be a growth-inducing impact. Local factors that could also influence or restrict growth include availability of infrastructure, such as roads and sewer connections, and availability of water.

2. Would the Project provide new employment?

It is anticipated that the proposed North Baja Pipeline Expansion Project would provide temporary employment for between 300 and 400 construction workers during the peak construction period. North Baja does not anticipate adding permanent staff to handle Project operations.

3. Would the Project provide new access to undeveloped or under developed areas?

The Project would require the creation of only two new permanent roads (totaling less than 0.1 mile). These roads would be used to gain access to the Blythe-Arrowhead Meter Station and pig receiver at the end of the Arrowhead Extension and the tap to the B-Line and pig launcher at the beginning of the IID Lateral. North Baja would use either new temporary access roads or existing access roads to access



the remainder of the Project. North Baja would implement OHV controls such as soil or rock berms and salvaged vegetation to prevent OHV use in environmentally sensitive areas.

4. Would the Project extend public service to a previously unserved area?

The Project would not extend public service to areas currently unserved by natural gas. The primary result of the North Baja Pipeline Expansion Project would be to meet increased energy demands from existing customers and to provide an alternate supply of natural gas to an existing power plant.

5. Would the Project tax existing community services?

The number of non-local workers would be small relative to current populations in the Project area and local communities have adequate infrastructure and community services to meet the needs of these non-local workers.

6. Would the Project cause development elsewhere?

As stated above, the power plant that would be served by the North Baja Pipeline Expansion Project is not solely dependent on the Project for an energy source. Therefore, the addition or absence of the gas supply from the proposed Project would not affect development. The Project is being proposed to meet existing energy needs and is not dependent upon future power plant expansions. However, the Project would link markets in southern California and other areas of the Southwest with an alternative source of natural gas.

During the scoping process, a comment was received from the EPA requesting that the growth and resulting impacts attributable to the IID Lateral be addressed. The IID Lateral would provide an alternate source of natural gas to the El Centro Generating Station and would have additional capacity that could support future expansions of the station. As discussed in Section 1.4.1, the IID has proposed an expansion at the station (the Unit 3 Repower) to serve the growing electrical load demands of the region. The El Centro Generating Station could be further expanded if and when IID determines that the electrical needs within its service territory have grown or will grow sufficiently to need additional generation.

While the Project is not associated with or dependent upon any specific expansions of power generation facilities or other industrial or residential developments, the availability of an alternative source of natural gas to the region could affect economic growth by exerting downward pressure on natural gas prices, by increasing competition among gas-producing regions. Lower or stable natural gas pricing could, in combination with other factors, either contribute to a positive economic climate conducive to growth, or moderate a scenario where higher gas prices may inhibit growth.

If the North Baja Pipeline Expansion Project is constructed, additional pipeline capacity would be available, which could potentially accommodate future projected growth in the Southwest and southern California regions. For this additional pipeline capacity to be fully utilized, the capacity of the Gasoducto Bajanorte pipeline would need to be doubled by looping the pipeline and adding compression. However, there is no evidence that the growth projected for the regions would be constrained by any assumed lack of availability of natural gas. Therefore, although the Project could support the projected growth, the growth could occur whether or not the Project is constructed.

## **Summary**

The potential growth-inducing impact of the North Baja Pipeline Expansion Project would be the delivery of an alternative or additional source of natural gas to existing natural gas users as described in Section 1.1. Providing an alternate fuel supply could lead to a positive economic environment conducive to growth or prevent increases in energy costs that might restrict growth. The existing power plant that would be supplied by the North Baja Pipeline Expansion Project (i.e., the IID El Centro Generating Station) would not be solely dependent on the gas supplied by the Project. Potential infrastructure growth might occur with or without the construction of the pipeline and thus would not be attributable to the proposed Project. However, to the extent that the IID Unit 3 Repower Project would diversify its suppliers of natural gas, the additional gas supplied by the proposed Project could be a growth-inducing impact.

## 4.17 ENVIRONMENTAL JUSTICE

Environmental justice is concerned with the question of whether a proposed project would expose minority or disadvantaged populations to proportionately greater risks or impacts compared to those borne by other individuals. This section identifies populations with a relatively high representation of minority or low-income status and evaluates whether the proposed Project would result in significant adverse effects that disproportionately affect identified minority or low-income populations.

### 4.17.1 Significance Criteria

An environmental justice impact would be considered significant if Project construction or operation would:

- result in a disproportionately high and adverse effect or impact. This “means an adverse effect or impact that: (1) is predominantly borne by any segment of the population, including a minority and/or a low-income population; or (2) would be suffered by a minority and/or low-income population and is appreciably more severe, or greater in magnitude, than the adverse effect or impact that would be suffered by a non-minority and/or non-low-income population.” (*Toolkit for Assessing Potential Allegations of Environmental Injustice* [EPA 2004]).

### 4.17.2 Background and Regulatory Setting

The EPA defines environmental justice as the “fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” Similarly, environmental justice is defined in California State planning law as the “fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” The EPA’s *Toolkit for Assessing Potential Allegations of Environmental Injustice* (EPA 2004) provides the following definitions for use in analyzing environmental justice impacts:

- Low-income means a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines.
- Low-income population means any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant farm workers or Native Americans) who will be similarly affected by a proposed project or action.
- Minority means a person, as defined by the U.S. Bureau of Census, who is a: (1) Black American (a person having origins in any of the black racial groups of Africa); (2) Hispanic person (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); (3) Asian American or Pacific Islander (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or (4) American Indian or Alaskan Native (a person having origins in any of the original people of North America and maintains cultural identification through tribal affiliation or community recognition).
- Minority population means any readily identifiable group of minority persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient

persons (such as migrant farm workers or Native Americans) who will be similarly affected by a proposed project or action. Minority populations should be identified where either: (1) the minority population of the affected area exceeds 50 percent or (2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

The major Federal and State laws, regulations, policies, and plans related to environmental justice are summarized in Table 4.17.2-1. No regional or local environmental justice policies and/or assessments have been performed by agencies within the study area.

To determine whether disproportionately high and adverse effects or impacts would occur, the EPA recommends a four-step process for carrying out an environmental justice assessment: (1) problem formation; (2) data collection; (3) assessment of the potential for adverse impacts; and (4) assessment of the potential for disproportionately high adverse impacts (EPA 2004).

During the problem formation step, the affected area is identified. The data collection step involves identifying environmental sources of stress and the likelihood of exposure, and collecting health-related, demographic, social, and economic data on the affected area. The third step involves assessing the adverse impacts on the environment and human health, and the fourth step is determining whether adverse impacts are disproportionately high in the affected area compared with the reference population. The use of specific components of this methodology is intended to be flexible. These steps are discussed below.

#### **4.17.3 Identification of Affected Area for Environmental Justice Analysis**

As discussed in Section 4.14.2, the DOT has developed a criterion for identifying HCAs. HCAs are calculated using a PIR, which is the radius of a circle within which the potential failure of a pipeline could have considerable impact on people or property. The PIR is proportional to the maximum allowable pipeline pressure and the pipeline diameter and was used to determine the specific area of potential impact associated with the Project. After the PIR for the B-Line, Arrowhead Extension, and IID Lateral facilities was determined, the affected census tracts within the PIR were identified. Table 4.17.3-1 identifies the PIR associated with the proposed pipelines as well as the affected census tracts within the PIR.

Within the census tracts affected by the PIR, census block-level data were analyzed for ethnic and racial data and census block group-level data were analyzed for income-related data. As previously discussed, approximately 89 percent of the land affected by construction and operation of the Project would be authorized by the BLM on public lands (including lands managed by the BLM, the BOR, and the FWS) (53 percent), California counties (36 percent), the States of Arizona or California or cities (less than 1 percent), or the CSLC (less than 1 percent). The remainder of the land that would be affected (11 percent) is privately owned. Because of the large amount of public land crossed, most of the census blocks along the proposed pipeline routes (about 79 percent) are unpopulated (see Table 4.17.3-2). In total, the PIR associated with the proposed Project would affect 1 populated census block in La Paz County, 34 populated census blocks in Riverside County, and 40 populated census blocks in Imperial County. These 75 populated census blocks within the PIR were, therefore, considered the area of potential impact for the purposes of the environmental justice analysis.

TABLE 4.17.2-1

**Major Laws, Regulatory Requirements, Policies, and Plans for Environmental Justice**

Law/Regulation/Policy/Agency	Key Elements and Thresholds
<b>FEDERAL</b>	
Equal Protection Clause of the U.S. Constitution	<ul style="list-style-type: none"> <li>The Fourteenth Amendment expressly provides that the States may not “deny to any person within [their] jurisdiction the equal protection of the laws.”</li> </ul>
Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (referred to as Executive Order 12898) (1994)	<ul style="list-style-type: none"> <li>Designed to focus attention on environmental and human health conditions in areas of high minority populations and low-income communities, and promote non-discrimination in programs and projects substantially affecting human health and the environment.</li> <li>Requires the U.S. Environmental Protection Agency (EPA) and all other Federal agencies (as well as State agencies receiving Federal funds) to develop strategies to address this issue.</li> <li>Requires that disproportionately high and adverse health or environmental impacts on minority and low-income populations be avoided or minimized to the extent feasible.</li> <li>Requires Federal agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health and environmental programs, policies, and activities on minority populations and low-income populations in the United States.</li> </ul>
Environmental Justice Implementation Plan (1997)	<ul style="list-style-type: none"> <li>Supplements the EPA environmental justice strategy and provides a framework for the development of specific plans and guidance for implementing Executive Order 12898.</li> </ul>
Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis (1998)	<ul style="list-style-type: none"> <li>Provides a framework for the assessment of environmental justice in the preparation of environmental impact statements (EISs) and environmental assessments under the National Environmental Policy Act (NEPA).</li> <li>Emphasizes the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.</li> </ul>
Toolkit for Assessing Potential Allegations of Environmental Injustice (2004)	<ul style="list-style-type: none"> <li>Provides a conceptual and substantive framework for understanding the EPA's environmental justice program.</li> <li>Presents a systematic approach with reference tools that can be used and adapted to assess and respond to potential allegations of environmental injustice as they occur, or to prevent injustices from occurring in the first place.</li> </ul>
Title 49 Code of Federal Regulations Part 192	<p>The Final Rule on Operator Public Awareness Programs (May 2005) states, in part, that:</p> <ul style="list-style-type: none"> <li>The operator's [public awareness] program must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation-related activities.</li> <li>The program must include activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations.</li> <li>The program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports gas.</li> <li>The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area.</li> </ul>
<b>STATE</b>	
California Constitution	<ul style="list-style-type: none"> <li>Provides for equal protection.</li> </ul>
Government Code Section 65040.12	<ul style="list-style-type: none"> <li>Defines environmental justice and designates the Office of Planning and Research as the coordinator for the State's environmental justice program.</li> </ul>
Government Code Section 65040.2	<ul style="list-style-type: none"> <li>Requires the Office of Planning and Research to develop environmental justice guidelines for local general plans.</li> </ul>

TABLE 4.17.2-1 (cont'd)

Major Laws, Regulatory Requirements, Policies, and Plans for Environmental Justice	
Law/Regulation/Policy/Agency	Key Elements and Thresholds
Governor's Office of Planning and Research - State of California General Plan Guidelines	<ul style="list-style-type: none"> <li>• Provides guidelines for local agencies on integrating environmental justice issues into their general plans.</li> <li>• Identifies procedural and geographic inequity.</li> <li>• Recommends that cities and counties develop public participation strategies that allow for early and meaningful community involvement in the general plan process by all affected population groups.</li> <li>• Recommends gathering socioeconomic data to improve the public participation process, identify underserved neighborhoods, plan for infrastructure and housing, and identify low-income and minority neighborhoods in which industrial facilities and uses that pose a significant hazard to human health and safety may be overconcentrated.</li> <li>• Recommends incorporating policies supportive of environmental justice in all of the mandatory elements of the general plan.</li> </ul>
California State Lands Commission (CSLC) – Environmental Justice Policy Statement in April 2002, amended October 2002 (see <a href="http://www.slc.ca.gov">www.slc.ca.gov</a> for the entire policy statement)	<ul style="list-style-type: none"> <li>• Developed to ensure equity and fairness in the CSLC's processes and procedures, including that "environmental justice is an essential consideration in the Commission's processes, decision, and programs and that all people who live in California have a meaningful way to participate in these activities."</li> <li>• Stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs, which are implemented, in part, through identification of and communication with relevant populations that could be adversely and disproportionately impacted by CSLC projects or programs and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations.</li> <li>• The staff of the CSLC is required to report back to the Commission on how environmental justice is integrated into its programs, processes, and activities.</li> </ul>

TABLE 4.17.3-1				
Potential Impact Radius Associated with the North Baja Pipeline Expansion Project				
Facility/Milepost Range	Location	Pipe Diameter (inches)	Potential Impact Radius (feet)	Census Tracts Affected
B-Line				
MPs 0.0 to 0.2	La Paz County, Arizona	42	982 <sup>a</sup>	206
MPs 0.2 to 11.7	Riverside County, California	42	982 <sup>a</sup>	459, 460
MPs 11.7 to 22.3	Riverside County, California	48	1,123 <sup>a</sup>	458, 459
MPs 22.3 to 79.8	Imperial County, California	48	1,123 <sup>a</sup>	124
Arrowhead Extension				
MPs 0.0 to 2.1	Riverside County, California	36	842	459
IID Lateral				
MPs 0.0 to 45.7	Imperial County, California	16	374	108, 112.01, 113, 114, 124
<sup>a</sup> A simultaneous failure of the existing A-Line would fall within the footprint of a failure of the proposed B-Line (which is the bigger diameter).				

TABLE 4.17.3-2			
Unpopulated Census Blocks within the Potential Impact Radius Associated with the North Baja Pipeline Expansion Project			
State/County	Number of Census Blocks	Number of Unpopulated Census Blocks	Unpopulated Percent
Arizona			
La Paz County	5	4	80.0
California			
Riverside County	94	60	63.8
Imperial County	263	223	84.8
Project Total	362	287	79.3
Source: U.S. Bureau of the Census, American FactFinder 2000a.			

#### 4.17.4 Demographic and Economic Data

This section describes the composition and distribution of minority and low-income populations in the States of Arizona and California as well as the counties and populated census blocks affected by the PIR associated with the Project and identifies populations with a relatively high representation of minority or low-income status. Because most of the facilities associated with the proposed Project are in rural, unincorporated areas, county-level data rather than city-level data were used as a reference population in this analysis. The U.S. Census Bureau's American FactFinder 2000 database was analyzed to obtain the racial and ethnic composition of smaller geographic areas, including census tracts, census block groups, and census blocks, to identify potential pockets of minority communities that may not be apparent when analyzing aggregated data on a county or State level.<sup>13</sup> Once populations with a relatively

<sup>13</sup> A census tract, which averages about 4,000 inhabitants, is delineated as a relatively homogeneous unit with respect to population characteristics, economic status, and living conditions. A subdivision of a census tract, a census block group is the smallest geographic unit for which the U.S. Census Bureau tabulates sample data. A census block group consists of all the blocks within a census tract with the same beginning number. A census block is the smallest geographic unit for which the U.S. Census Bureau tabulates 100 percent data. Many census blocks correspond to individual city blocks bounded by streets; however, census blocks, especially in rural areas, may include many square miles and may have some boundaries that are not streets.

high representation of minority or low-income status are identified, the impact analysis in Section 4.17.5 discusses whether the Project would disproportionately affect such identified minority or low-income populations.

#### 4.17.4.1 Minority Population

Table 4.17.4-1 presents the ethnic and racial composition of the population in the States, Counties, and populated census blocks affected by the Project.<sup>14</sup>

TABLE 4.17.4-1									
Summary of Racial and Ethnic Demographics within the Potential Impact Radius Associated with the North Baja Pipeline Expansion Project <sup>a</sup>									
Location	Total Population	Percent White	Percent Black or African American	Percent American Indian & Alaska Native	Percent Asian	Percent Native Hawaiian & Other Pacific Islander	Percent Other Race	Percent Hispanic or Latino -Any Race	Percent Minority
Arizona	5,130,632	75.5	3.1	5.0	1.8	0.1	14.5	25.3	24.5
La Paz County	19,715	74.2	0.8	12.5	0.4	0.1	12.0	22.4	25.8
Census Blocks Affected by the B-Line	4	75.0	0.0	25.0	0.0	0.0	0.0	0.0	25.0
California	33,871,648	59.5	6.7	1.0	10.9	0.3	21.6	32.4	40.5
Riverside County	1,545,387	65.6	6.2	1.2	3.7	0.3	23.0	36.2	34.4
Census Blocks Affected by the B-Line and Arrowhead Extension	725	73.0	4.4	1.7	0.1	0.6	20.3	32.4	27.0
Imperial County	142,361	49.4	4.0	1.9	2.0	0.1	42.6	72.2	50.6
Census Blocks Affected by the B-Line and IID Lateral	622	63.0	3.1	1.3	0.2	0.0	32.5	58.5	37.0
<sup>a</sup> 2004 data are available for the State and county levels, but are not available for census block levels. In order to be consistent, 2000 data were used throughout.									
Source: U.S. Bureau of the Census, Census 2000a.									

As shown in Table 4.17.4-1, the Hispanic or Latino population within the census blocks affected by the B-Line and IID Lateral in Imperial County is 58.5 percent, which is greater than the 50 percent threshold used by the EPA to define a minority population. However, the percentage of Hispanic population affected by the Project in Imperial County is less than the percentage of the Hispanic population in the county as a whole (72.2 percent). Although there are too few individuals living in La Paz County's affected census blocks for derived statistics to be meaningful (only four people total), they are in the tables of this section for the sake of completeness. In the census blocks potentially affected by the B-Line and Arrowhead Extension within Riverside County, 1.7 percent is American Indian and/or

<sup>14</sup> Historically, the U.S. Census Bureau has classified race and Hispanic origin as two separate concepts. The recent introduction of the option to report more than one race added more complexity to the presentation and comparison of U.S. Census data. Race and Hispanic origin are two separate concepts in the Federal statistical system. People who are Hispanic may be of any race. Each person has two attributes, their race (or races) and whether or not they are Hispanic. Overlap of race and Hispanic origin is the main comparability issue. For more information on the definition of the term "Hispanic" see U.S. Census Bureau, 2004 <http://www.census.gov/population/www/socdemo/compraceho.html>. This document uses the term "Hispanic or Latino."



Alaska Native, and 0.6 percent is Native Hawaiian and/or Other Pacific Islander, which is an appreciably higher percentage than the county average as a whole (1.2 and 0.3 percent, respectively). Within the census blocks potentially affected by the B-Line and IID Lateral in Imperial County, there are no minority populations that comprise a higher percentage of the total population than the county as a whole. Therefore, the detailed census block analysis of the ethnic composition of the population focuses only on the Hispanic or Latino population in the census blocks potentially affected by the B-Line and IID Lateral in Imperial County (see Table 4.17.4-2), the American Indian and/or Alaska Native population affected by the B-Line in La Paz County (see Table 4.17.4-3), and the American Indian and/or Alaska Native and Native Hawaiian and/or Other Pacific Islander populations affected by the B-Line and Arrowhead Extension in Riverside County (see Table 4.17.4-4).

TABLE 4.17.4-2			
Populated Census Blocks Containing Hispanic or Latino Populations within the Potential Impact Radius Associated with the North Baja Pipeline Expansion Project in Imperial County			
Location	Total Population	Total Number of Hispanic or Latino Individuals	Percent Hispanic or Latino
California	33,871,648	10,966,556	32.4
Imperial County	142,361	102,817	72.2
Census Tract 108, Block 1379	2	2	100.0
Census Tract 108, Block 1398	8	2	25.0
Census Tract 108, Block 2054	5	5	100.0
Census Tract 108, Block 2078	5	5	100.0
Census Tract 108, Block 2083	2	2	100.0
Census Tract 112.01, Block 2014	39	37	94.9
Census Tract 113, Block 1055	9	7	77.8
Census Tract 113, Block 1057	19	12	63.2
Census Tract 113, Block 1058	149	114	76.5
Census Tract 113, Block 1065	48	40	83.3
Census Tract 113, Block 1070	61	45	73.8
Census Tract 113, Block 1072	13	2	15.4
Census Tract 113, Block 1100	8	4	50.0
Census Tract 113, Block 1107	16	8	50.0
Census Tract 113, Block 1115	6	6	100.0
Census Tract 113, Block 1116	8	6	75.0
Census Tract 113, Block 1120	2	2	100.0
Census Tract 113, Block 1152	3	1	33.3
Census Tract 113, Block 2000	53	38	71.7
Census Tract 113, Block 5018	2	1	50.0
Census Tract 124, Block 2101	21	6	28.6
Census Tract 124, Block 2493	6	1	16.7
Census Tract 124, Block 2568	38	18	47.4
Source: U.S. Bureau of the Census, Census 2000a.			

TABLE 4.17.4-3			
<b>Populated Census Blocks Containing American Indian or Alaska Native Populations within the Potential Impact Radius Associated with the North Baja Pipeline Expansion Project in La Paz County</b>			
Location	Total Population	Total Number of American Indian or Alaska Native Individuals	Percent American Indian or Alaska Native
Arizona	5,130,632	255,879	5.0
La Paz County	19,715	2,470	12.5
Census Tract 206, Block 1075	4	1	25.0
Source: U.S. Bureau of the Census, Census 2000a.			

TABLE 4.17.4-4					
<b>Populated Census Blocks Containing American Indian, Alaska Native, Native Hawaiian, and Other Pacific Islander Populations within the Potential Impact Radius Associated with the North Baja Pipeline Expansion Project in Riverside County</b>					
Location	Total Population	Total Number of American Indian & Alaska Native	Percent American Indian & Alaska Native	Total Number Native Hawaiian & Other Pacific Islander	Percent Native Hawaiian & Other Pacific Islander
California	33,871,648	333,346	1.0	116,961	0.3
Riverside County	1,545,387	18,168	1.2	3,902	0.3
Census Tract 458, Block 6214	68	1	1.5	0	0.0
Census Tract 459, Block 1122	12	6	50.0	0	0.0
Census Tract 460, Block 2014	116	1	0.9	0	0.0
Census Tract 460, Block 2037	30	2	6.7	4	13.3
Census Tract 460, Block 2056	68	2	2.9	0	0.0
Source: U.S. Bureau of the Census, Census 2000a.					

The census block data presented in Table 4.17.4-2 show the number and percent of the population that are Hispanic or Latino in the blocks that contain those populations within the PIR of the Project in Imperial County. The percentage of Hispanics or Latinos in each census block are presented in comparison with county and State percentages. When looking at the affected census blocks, 14 of the affected blocks contain greater than 50 percent Hispanic or Latino populations. Of these 14 blocks, 12 also contain a higher percentage of Hispanics or Latinos than the county average as a whole.

Table 4.17.4-3 shows the number and percentage of persons identifying themselves as American Indians and/or Alaska Natives in the populated census block affected in La Paz County. The percentage of American Indians and/or Alaska Natives in this census block is presented in comparison with county and State percentages. In 2000, the percentage of American Indians and/or Alaska Natives comprised 25 percent of the total population in the populated block. This percentage is twice the percentage of the county as a whole, and five times the average for the State of Arizona (12.5 and 5 percent, respectively). It is important to note, however, that this census block contains only four persons, of which one is American Indian or an Alaska Native.

The census block data presented in Table 4.17.4-4 show the number and percent of the population that are American Indians, Alaska Natives, Native Hawaiians, and/or Other Pacific Islanders in the blocks that contain those populations within the PIR of the B-Line and Arrowhead Extension in Riverside County. The percentage of American Indians, Alaska Natives, Native Hawaiians, and/or Other Pacific Islanders in each census block is presented in comparison with county and State percentages. Four of the

five populated census blocks identified in Table 4.17.4-4 have higher percentages of American Indians and/or Alaska Natives than the county as a whole. In addition, one census block has four Native Hawaiians and/or Other Pacific Islanders, comprising 13.3 percent of the population, compared to an average of 0.3 percent for both the county and State.

It should be noted that because of the often irregular sizes and shapes of census blocks, not all residents included in each block identified as having minority populations live in close enough proximity to the proposed pipeline route to be impacted. Nevertheless, the data show that minority populations are present along the proposed pipeline routes and, therefore, there is a potential for disproportionate adverse impacts on these minority communities.

Although the information discussed in this section is based on information from the U.S. Bureau of the Census, the potential exists for migrant minority populations to have been underestimated by the census in the Project area. In California, this can occur in areas with large populations of migrant workers associated with large agricultural operations, particularly orchards. It is possible that such populations exist within the Project area in the agricultural areas concentrated near Blythe and the western portion of the IID Lateral; however, based on a review of aerial photographs, no orchards occur on the land that would be affected by the Project. Nevertheless, there is a potential for disproportionate adverse impacts on these communities.

As discussed in Section 4.17.3, the majority of the census blocks within the PIR associated with the Project are unpopulated. Even though the census blocks are unpopulated, there can still be an environmental justice concern if property is owned by a member of a minority group or there are resources such as traditional cultural properties nearby. The majority of the land associated with the unpopulated census blocks is managed by Federal agencies (i.e., the BLM, the BOR, the FWS). No tribal lands would be crossed. In addition, no traditional cultural properties have been identified in the proposed Project's area of potential effect to date (see Section 4.11.5).

#### **4.17.4.2 Income Distribution in the Project Area**

Table 4.17.4-5 presents the income distribution within the Project area based on statistics from the U.S. Census Bureau. The U.S. Census Bureau uses the poverty guidelines developed annually by the U.S. Department of Health and Human Services to determine the percentage of the population living below the poverty line. The poverty guidelines do not vary geographically within the conterminous United States and are determined based on the size of the family, ages of family members, and the total family income. On average, La Paz, Riverside, and Imperial Counties all had significantly lower annual per capita and household income levels and similar or higher poverty levels than their respective State averages. However, in the case of Riverside and Imperial Counties, this is due in part to these counties being more rural than the highly urbanized western portion of the State of California.

TABLE 4.17.4-5

**Summary of Income Distribution within the Potential Impact Radius  
Associated with the North Baja Pipeline Expansion Project**

Location	Total Population (2000)	Per Capita Income (1999)	Median Household Income (1999)	Percentage of Persons Below Poverty (1999)
Arizona	5,130,632	\$20,275	\$40,558	13.6
La Paz County	19,715	\$14,916	\$25,839	19.3
Census Tract 206, Block Group 1	1,356	\$14,372	\$27,000	22.6
California	33,871,648	\$22,711	\$47,493	13.9
Riverside County	1,545,387	\$18,689	\$42,887	13.9
Census Tract 458, Block Group 6	1,440	\$11,303	\$27,404	28.3
Census Tract 459, Block Group 1	963	\$18,562	\$40,893	15.3
Census Tract 459, Block Group 2	994	\$8,236	\$20,625	32.9
Census Tract 460, Block Group 2	702	\$20,872	\$36,071	29.1
Imperial County	142,361	\$13,239	\$31,870	20.8
Census Tract 108, Block Group 1	608	\$15,776	\$34,219	35.2
Census Tract 108, Block Group 2	877	\$22,868	\$49,844	2.1
Census Tract 112.01, Block Group 2	1,030	\$10,526	\$30,667	12.0
Census Tract 113, Block Group 1	870	\$12,906	\$37,625	17.5
Census Tract 113, Block Group 2	1,377	\$11,021	\$30,815	23.2
Census Tract 113, Block Group 5	1,404	\$12,331	\$47,083	8.5
Census Tract 124, Block Group 2	637	\$13,286	\$16,389	28.6

Source U.S. Bureau of the Census, Census 2000a.

A review of the block group data from the 2000 census shows that the poverty rate along the B-Line in La Paz County is 22.6 percent, which is higher than the county average of 19.3 percent although the median household income for the affected block group is higher than the county average (\$27,000 compared to \$25,839). All four of the block groups within the PIR of the proposed B-Line and Arrowhead Extension in Riverside County have lower median household incomes and higher poverty rates than the county average. In Imperial County, the PIR associated with the B-Line and IID Lateral would affect three block groups with lower median household incomes than the county average. Two of these three block groups also have higher poverty rates than the county average. A third block group also has a higher poverty rate than the county average but its median household income is above the county average. In summary, the data show that low-income populations are present along the proposed pipeline routes. Therefore, there is a potential for disproportionate adverse impacts on these low-income populations.

#### **4.17.5 Impact Analysis**

Not all impacts identified in this EIS/EIR are considered to affect minority or low-income populations. Examples of Project-related impacts that are considered impacts with potential environmental justice issues are described below.

The main adverse impacts associated with construction of the proposed Project would be the temporary noise, dust, and traffic congestion, none of which are considered significant adverse impacts after mitigation. These impacts would occur along the entire pipeline routes and in areas with a variety of socioeconomic backgrounds. Therefore, these impacts are not considered to result in a disproportionately high and adverse effect or impact on minority or low-income populations. As a result, this analysis does

not evaluate construction-related impacts any further. Impacts associated with operation of the Project are described below.

None of the proposed facilities would result in increased air emissions during operation (see Section 4.12.4). The pipeline facilities would be buried and would, therefore, not have an impact on visual resources during operation. As discussed in Section 4.8.7, construction of the new aboveground facilities would have a permanent impact on visual resources, and modifications at the existing aboveground facilities would result in an incremental increase in impacts on visual resources but would generally be minor because of the presence of the existing facilities. The impacts on visual resources associated with these facilities are considered to be less than significant and are, therefore, not considered to result in a disproportionately high and adverse effect or impact on minority or low-income populations.

The long-term potential public safety impacts associated with operation of the pipelines (the potential for a release of natural gas from a leak or rupture of the pipelines followed by ignition and burning of the gas cloud) could represent an environmental justice concern. However, construction and operation of the proposed facilities would affect a mix of ethnic and socioeconomic areas in the Project area as a whole. In addition, the pipeline and aboveground facilities associated with the Project would be designed, constructed, operated, and maintained in accordance with or to exceed the DOT Minimum Federal Safety Standards in Title 49 CFR Part 192 and the CPUC, General Order 112-E. These regulations, which are intended to protect the public and to prevent natural gas facility accidents and failures, apply to all areas along the proposed pipeline routes regardless of the presence or absence of minority or low-income populations. As discussed in Section 4.14.2, none of the safety-related potential impacts associated with the Project are considered significant. Therefore, the safety-related impacts are not considered to result in a disproportionately high and adverse effect or impact on minority or low-income populations.

Executive Order 12898 emphasizes the importance of providing opportunities for community input into the NEPA process. Similarly, the CSLC's Environmental Justice Policy stresses communication and public involvement in the decision-making process. Information on the public notification and participation process conducted for the proposed Project is provided in Section 1.3. A recent Final Federal Rule, published in May 2005 for Title 49 CFR Part 192, requires the operator to include, in its public awareness plans, measures to prepare and distribute a comprehensive program that includes activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations. The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area. As discussed in Section 1.3, open houses and public scoping meetings were held in the Project area in July and September of 2005 to inform the public about the Project and provide an opportunity for the public to ask questions and express concerns. The draft EIS/EIR was issued in September 2006 and the public was given 90 days to review and comment on the document in the form of written comments and at two public meetings held in the Project area in December 2006. These public input opportunities were announced in the local newspapers in English and Spanish, and Spanish translators were present at the public meetings.

#### **4.17.6 No Project Alternative**

Under the No Project Alternative, the FERC would deny North Baja's application for a Certificate and a Presidential Permit amendment, the CSLC would deny North Baja's application for an amendment to its right-of-way lease across California's Sovereign and School Lands, and the BLM would deny North Baja's application to amend its existing Right-of-Way Grant and obtain a Temporary Use Permit for the portion of the Project on Federal lands. The No Project Alternative means that the Project would not go forward and the Project-related facilities would not be installed. Accordingly, none of the

potential environmental impacts identified for the construction and operation of the proposed Project would occur.

Because the proposed Project is privately funded, it is unknown whether North Baja would fund another energy project in California. However, should the No Project Alternative be selected, the energy needs identified in Section 1.1 would likely be addressed through other means, such as through other LNG or natural gas-related pipeline projects. Such projects may result in potential environmental impacts of the nature and magnitude of the proposed Project as well as impacts particular to their respective configurations and operations; however, these impacts cannot be predicted with any certainty at this time.